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SCHOOL OF LAW

Re: Docket NPRM 02-230

December 6, 2002

Ms. Marlene Dortch Secretary, Federal Communications Commission 445 12th Street, SW Washington, DC 20554 via Electronic Filing

Dear Ms. Dortch,

This comment is filed by the Free Software Foundation ("the Foundation"), a 501(c)(3) charitable corporation organized under the laws of the Commonwealth of Massachusetts, with its headquarters in Boston. The Foundation encourages the making and distribution of free software, which is software that can be freely copied, modified, and redistributed by its users. The Foundation publishes the GNU General Public License ("GPL"), which is the most commonly used copyright license for the distribution of free software, and which covers major portions of the GNU/Linux operating system—used on tens of millions of computers worldwide—along with thousands of other free software programs for use on general purpose computers. The Foundation also develops and distributes free software, including GNU Radio, which is free software for receiving and decoding various forms of digital and analog radio communication. Under the terms of the GPL, the source code of GNU Radio is published on the Internet and distributed between countless users throughout the world.

Executive Summary

The Commission's proposal to regulate digital broadcast content through the "ATSC flag," as proposed by the BPDG, is technologically infeasible, commits the Commission to an extension of its jurisdiction to include regulation of software for all general purpose computers, which lies beyond the Commission's current statutory authority, and impermissibly interferes with the public's First Amendment rights to communicate technical information without limitation by government.

The Proposed Rules Are Technologically Unfeasible

The BPDG Final Report (at 11) claims that measures to control digital outputs would not interfere with the ability to send DTV content through home or other personal data networks, between receivers, recorders and digital display devices. If this claim were correct, then in order to prevent software running on general purpose computers in such networks from making transformed or untransformed copies of such bitstreams, it would be necessary for the Commission to prohibit all software on general purpose computers that could operate on DTV waveform data. Such computer programs do not engage in wireless communications: they merely process digital information in order to decode its content. The Commission would be claiming jurisdiction over software running in devices that do not engage in wireless communications, and which perform arithmetic manipulation of binary

information that may or may not have been acquired by receipt of radio signals, and may or may not have been formatted to contain an ATSC flag in the first place.

The Proposed Rules Are Beyond the Commission's Jurisdiction, Both Ancillary and Express

Any experiment in regulating general purpose data processing software running on general purpose computing hardware is not one that the Commission should undertake. The Commission's jurisdiction to impose such regulations under present statutory authority is at best doubtful. First, the Commission has no ancillary jurisdiction to impose such regulations, as they are not reasonably ancillary to any explicit responsibilities outlined in any portion of the Communications Act ("the Act"). The Act assigns the Commission tasks related primarily to communications, not copyrights. 47 U.S.C. §152(a). Copyrights are solely the responsibility of Congress and the Copyright Office. 17 U.S.C. §701(a). It is unmistakably clear that the proposed regulations are primarily concerned with copyrights, not communication, as the Commission itself manifests by repeatedly using the terms "copy protection" and "piracy" in the NPRM (Para 1) and as the proponents of such regulations themselves concede by naming their working group the "Copy Protection" working group. Therefore, such regulations cannot be said to be "reasonably" ancillary to any of the Commissions' express responsibilities. FCC v. Midwest Video, 440 U.S. 689 (1979).

Second, neither $\S 336(b)(4)$ nor (b)(5) of the Act nor any other statutory provision provide the Commission with any jurisdiction. Section (b)(4) is expressly limited to regulations necessary to "assure the quality of the signal." Broadcast flag regulations would do absolutely nothing to "assure the quality of the signal." In fact, for some recipients of a digital signal, the presence of a broadcast flag may actually disrupt or degrade the quality of the signal. Section (b)(5) is limited by the preamble of $\S 336(b)$ to only those regulations required by $\S 336(a)$, which are only regulations that pertain to "holders of [broadcast] licenses." The proposed broadcast flag regulations do not pertain to "holders of [broadcast] licenses," but rather would severely impact individuals and entities that have nothing to do with broadcasting at all, including computer programmers, electronic manufacturers, and consumers. An exhaustive search of the entire Act results in the unmistakable conclusion that there is no other statutory provision that could even arguably provide the Commission with the jurisdiction it must have in order to implement rules regarding the broadcast flag. Therefore, neither $\S 336(b)(4)$ nor (b)(5) nor any other statutory provision provides the Commission with jurisdiction to adopt and implement such rules.

The Proposed Rules Would Violate National Policy and the First Amendment

Further, the Commission should not implement broadcast flag rules because to do so would violate §230(b) of the Act and the First Amendment. Section 230(b) states that it is the policy of the United States to "promote the continued development of ... interactive media" and to "encourage the development of technologies which maximize user control over what information is received by [those] who use ... interactive computer services." GNU Radio is an interactive media technology which, because it is Free Software licensed under the GNU GPL, grants its users significant control over what information it receives, or does not receive. The implementation of any broadcast flag rules by the Commission would severely hamper the development and proliferation of GNU Radio and dramatically limit the rights of GNU Radio users to control what information is, or is not, received by them. Therefore, clearly, any such rules would be violate the Congressional declaration of national policy and be inconsistent with the Act. As such, the Commission is expressly forbidden from adopting them under §154(i) of the Act.

Even if the Commission had jurisdiction to issue orders prohibiting the distribution of general purpose data processing software for general purpose computing equipment, such regulations would commit the Commission to an unprecedented enforcement effort to control access to generally-available technical information, in probable violation of the First Amendment. Could the Commission actually prohibit the publication of technical papers describing how the digital output of permitted radio receivers can be interpreted so as to recover DTV content? Would the Commission propose to prohibit the continued circulation of existing technical publications or software?

In addition, the source code of GNU Radio is distributed through the Internet and is speech protected by the First Amendment. Universal City Studios v. Corley, 293 F.3d 429 (2nd Cir. 2001). The Supreme Court's ruling in Reno v. ACLU, 521 U.S. 844 (1997), granted speech on the Internet a higher level of First Amendment protection than that afforded speech transmitted through traditional electronic media, such as broadcast television. As such, broadcast flag rules, because they would impact the First Amendment rights of individuals to speak on the Internet, are much more likely to violate the First Amendment than rules that impact only other forms of broadcasted speech. For these reasons, the Commission should seriously contemplate and refrain from violating both the policies of the United States and the First Amendment, meaning specifically that it should not implement broadcast flag rules which, by definition, would do both.

Conclusion

The appropriate laws for the control of copyright infringement are copyright statutes. The BPDG Final Report represents an implausible and unworkable invitation to an unprecedented extension of regulatory jurisdiction in an attempt to replace the copyright balance by government control of the design and function of all digital hardware. Such a venture exceeds the Commission's statutory authority, lacks any plausible enforcement mechanism, and would require prohibition of publication of generally-useful technical information in violation of the First Amendment. The Foundation strongly advises that the Commission refrain from further action.

Very truly yours,

Eben Moglen General Counsel

Free Software Foundation